

CLAIMS

What is claimed is:

- 1 1. A removable access panel system, comprising:
2 a frame suitable for containing an electronic component including an aperture therein,
3 said frame further including at least one pocket adjacent to said aperture, wherein
4 said at least one pocket includes an arced surface protruding generally into the
5 pocket from a side of the pocket generally opposite the aperture;
6 a panel door capable of rotating to obtain an open position and a closed position, the
7 panel door including;
8 at least one extension with a generally arced surface suitable for being accepted
9 into the at least one pocket; and
10 a securing mechanism capable of securing the panel door to the frame in the closed
11 position.
- 1 2. The removable access panel system of claim 1, further comprising a means for
2 aligning the panel door to the frame.
- 1 3. The removable access panel system of claim 1, wherein the pocket is disposed
2 generally below the aperture when the removable panel access system is aligned with
3 gravity.
- 1 4. The removable access panel system of claim 1, wherein the panel door is
2 capable of self-extracting itself in the open position.
- 1 5. The removable access panel system of claim 1, wherein the at least one
2 extension includes tapers on two surfaces of the extension generally perpendicular to

the arced surface, wherein the at least one pocket includes corresponding tapered structures for accepting the at least one extension.

6. The removable access panel system of claim 1, wherein the securing mechanism is at least one of a latch, a screw, a slide lock, and a twist lock.

7. The removable access panel system of claim 1, wherein the securing mechanism is disposed on an opposite end of the panel door than the at least one extension.

8. The removable access panel system of claim 1, wherein the panel door is capable of electromagnetic shielding the electronic component when in the closed position.

9. The removable access panel system of claim 1, wherein the panel door is suitable for preventing the ingress of debris into the aperture, in the closed position.

10. A removable self-extracting panel system, comprising:
a frame for containing an electronic component including an aperture therein, said frame further including at least one pocket adjacent to said aperture, wherein said at least one pocket includes an arced surface protruding generally into the pocket from a side of the pocket generally opposite the aperture, whereby the innermost protrusion of the arced surface occurs at the outer surface of the frame;
a panel door capable of rotating to obtain an open position and a closed position, the panel door including;
at least one extension with a generally arced surface suitable for being accepted into the at least one pocket;

11 a securing mechanism capable of securing the panel door to the frame in the closed
 12 orientation; and
 13 wherein the panel door is capable of self-extracting itself in the open position.

1 11. The removable access panel system of claim 10, further comprising a means
 2 for aligning the panel door to the frame.

1 12. The removable access panel system of claim 10, wherein the at least one
 2 extension includes a taper on the sides of the extension generally perpendicular to the
 3 arced surface, wherein the at least one pocket includes corresponding tapered
 4 structures for accepting the at least one extension.

1 13. The removable access panel system of claim 10, wherein the securing
 2 mechanism is at least one of a latch, a screw, a slide lock, and a twist lock.

1 14. The removable access panel system of claim 10, wherein the securing
 2 mechanism is disposed on an opposite end of the panel door than the at least one
 3 extension.

1 15. The removable access panel system of claim 10, wherein the panel door is
 2 capable of electromagnetic shielding the electronic component when in the closed
 3 position.

1 16. The removable access panel system of claim 10, wherein the panel door is
 2 suitable for preventing the ingress of foreign debris into the aperture, in the closed
 3 position.

1 17. A removable access panel system, comprising:

2 a means for containing an electronic component including a means for accessing said
3 electronic component therein, wherein said containing means further includes
4 a means for accepting adjacent to said accessing means, said accepting means
5 including an arced surface protruding into said accepting means from a side of
6 the accepting means generally opposite said accessing means;
7 a means for covering said accessing means, said covering means capable of rotating
8 to obtain an open position and a closed position, wherein said covering means
9 includes at least one extension with a generally arced surface suitable for
10 being accepted into said accepting means; and
11 a securing means capable of securing said covering means to said containing means in
12 the closed position.

1 18. The removable access panel system of claim 17, further comprising a means
2 for aligning the covering means to the containing means.

1 19. The removable access panel system of claim 17, wherein the accepting means
2 is disposed generally below the accessing means when the removable panel access
3 system is aligned with gravity.

1 20. The removable access panel system of claim 19, wherein the covering means
2 is capable of self-extracting itself in the open position.

1 21. The removable access panel system of claim 19, wherein the at least one
2 extension includes tapers on two surfaces of the extension generally perpendicular to
3 the arced surface, wherein the accepting means includes corresponding tapered
4 structures for accepting the at least one extension.

1 22. The removable access panel system of claim 19, wherein the securing means
2 is disposed on an opposite end of the covering means than the at least one extension.

1 23. The removable access panel system of claim 19, wherein the covering means
2 is capable of electromagnetic shielding the electronic component when in the closed
3 position.

1 24. The removable access panel system of claim 19, wherein the covering means
2 is suitable for preventing the ingress of debris into the aperture, in the closed position.